

### **REMARKS**

Favorable reconsideration is respectfully requested in view of the foregoing amendments and the following remarks.

#### **I. CLAIM STATUS & AMENDMENTS**

The specification was amended at page 11, line 22 to page 12, line 1 to clarify that the inteins facilitate a splicing reaction. Support for this amendment can be found in the specification, for example, at page 9, line 15 to page 10, line 3.

The specification was amended at page 17, lines 12-16 to clarify "m125" and "m126" as suggested by the Examiner, and as supported throughout by the disclosure.

Support for the amendment at page 18, lines 6-13 regarding the "GFP (1-128 amino acids)" and "VDE (1-454 amino acids)" of the disclosure can be found in the specification, for example, at page 7, lines 10-12 and page 16, line 21 to page 17, line 1.

Minor editorial corrections have also been effected to the specification which are self-explanatory.

Claims 1-11 were pending in this application when last examined, and stand rejected.

Claims 1, 3, 6, 10 and 11 have been amended.

Claim 1 was amended to clarify the structural relationship for the components of the probe by including the structural elements of claim 2 and further elements defining the relationship of probe a and probe b. Support for this amendment can be found in original claims 2, 4, and 5 and in the specification, for example, at page 10, lines 4-14, page 11, lines 13-15 and page 12, lines 8-11.

Claims 3, 6 and 8 were amended to recite proper dependency.

Claims 10 was amended to clarify the claimed method. Support for the method steps added to claim 10 can be found in the specification, for example, at page 6, line 22 to page 7, line 10 (Fig. 1), page 10, lines 14-24 (Fig. 1) and in original claim 10.

Claim 11 was amended to clarify that the polynucleotide which expresses the protein linked with probe a and the protein link with probe b is introduced into the eukaryotic cell. Claim 11 was also amended to be consistent with the preamble of the claim 10. Support for these amendments can be found in original claims 10-11.

Therefore, no new matter has been added by this amendment.

Claims 2, 4 and 5 have been canceled without prejudice or disclaimer thereto. Applicants reserve the right to file a continuation or divisional application on any canceled subject matter.

Claims 1, 3 and 6-11 are now pending in this application.

## **II. OBJECTION TO THE SPECIFICATION**

The specification was objected to for containing minor informalities. See page 2 of the Office Action.

It is respectfully submitted that the present amendment overcomes this objection for the following reasons.

The specification was amended at page 17, lines 12-16 to clarify "m125" and "m126" as suggested by the Examiner and as known in the art.

It is also respectfully submitted that the original specification contains clear support for the present invention, in particular, the structural elements of the claimed probe. For instance, the specification at page 6, line 22 to page 7, line 10 (Fig. 1) and the various examples (for instance, Example 1 on pages 16-7) clearly describe the relationship of the various components of the present invention.

Nonetheless, the specification was amended at pages 11-12 and 18 to clarify the structural basis for determining the orientation of the amino acid sequence (and the corresponding nucleic acid sequences) for the probes.

### **III. OBJECTION TO THE CLAIMS**

Claim 11 was objected to on the basis that the present tense of the verb “to link” at the end of line 2 of the claim is grammatically incorrect. See page 3.

Claim 11 was amended as suggested to overcome this objection.

### **IV. REJECTION UNDER 35 U.S.C. § 112, SECOND PARAGRAPH**

Claims 1-11 were rejected under 35 U.S.C. § 112, second paragraph, as indefinite. See page 3 of the Office Action.

This rejection is respectfully traversed as applied to the amended claims for the following reasons.

The claims have been amended to clarify the structural relationship for the components of the claimed probe.

As noted above, claim 1 was amended to clarify the structural relationship for the components of the probe by including the structural elements of claim 2 and further elements defining relationship of probe a and probe b as disclosed in the specification, for example, at page 6, line 22 to page 7, line 10, page 10, lines 4-14, page 11, lines 13-15 and page 12, lines 8-11.

Claim 4 has been canceled. Nonetheless, regarding the concern for phrase “the intein is an endonuclease derived from yeast VMA” in claim 4, it is respectfully noted that VMA1-derived endonuclease (VDE) is also called an intein. Thus, such an intein is an endonuclease. In this regard, please see the disclosure at page 5, lines 16-17 and at page 11, last paragraph, wherein it is indicated that the inteins are preferably site-specific endonucleases.

Claim 10 was amended to clarify the method steps of the claimed method as disclosed in the specification, for example, at page 15, lines 1-23.

In view of the above, the rejection of claims 1-11 under 35 U.S.C. § 112, second paragraph, is untenable and should be withdrawn.

**CONCLUSION**

In view of the foregoing amendments and remarks, the present application is in condition for allowance and early notice to that effect is hereby requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact the undersigned attorney at the telephone number below.

Respectfully submitted,

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